CITY OF GRAND JUNCTION PARSES 6, 8 AND 10 OPEN-CUT SEWER REPLACEMENT GRAND JUNCTION, COLORADO BID SET

CONTACTS

CITY OF GRAND JUNCTION TOBY THIEMAN 333 WEST AVENUE, BUILDING C 970-224-1559

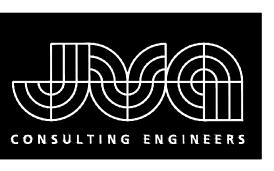
GRAND JUNCTION, CO 81501 TOBYT@GJCITY.ORG

ENGINEER: JVA, INC

JVA, INC COOPER BEST, P.E. 817 COLORADO AVENUE, SUITE 301 (970) 404–3003 GLENWOOD SPRINGS, CO 81601 CBEST@JVAJVA.COM

SURVEYOR:

WILLIAM H SMITH AND ASSOCIATES, INC 1048 INDEPENDENCE AVE, SUITE A207 GRAND JUNCTION, CO 81505 ROBERT WHITSON
970-257-9101
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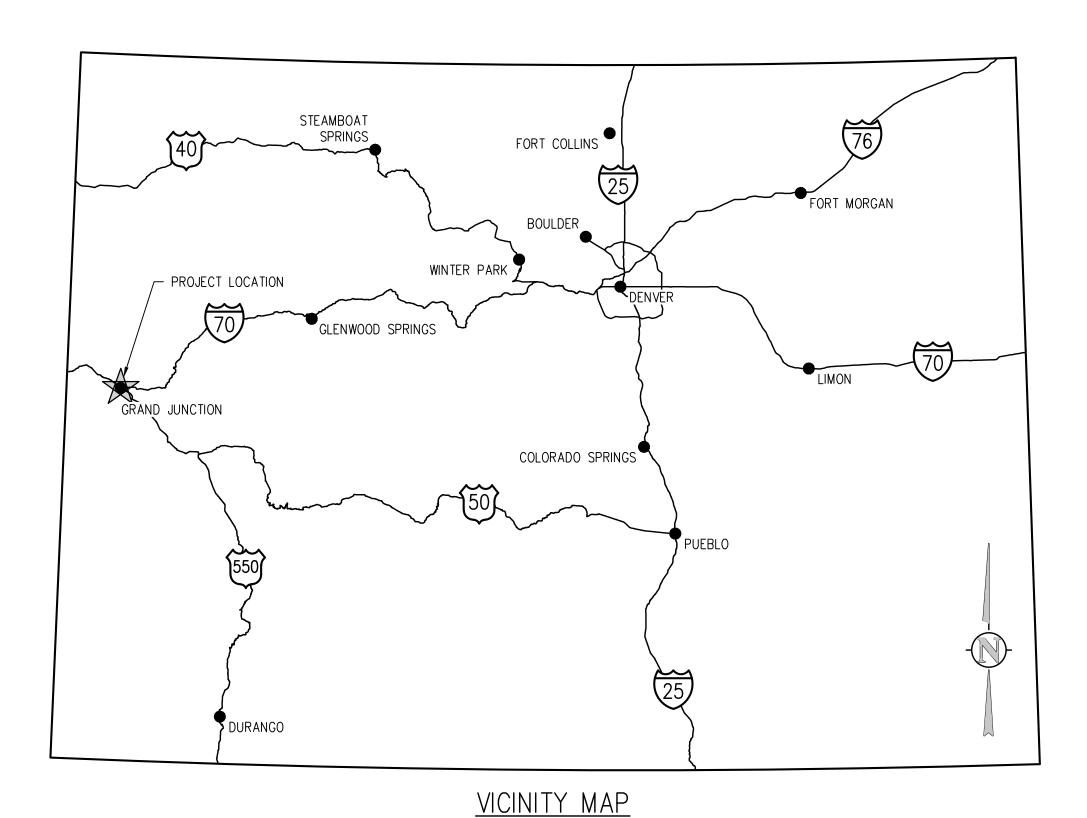
JVA, Inc. 817 Colorado Ave., Suite 301 Glenwood Springs, CO Zip 81601 970.404.3100 www.jvajva.com

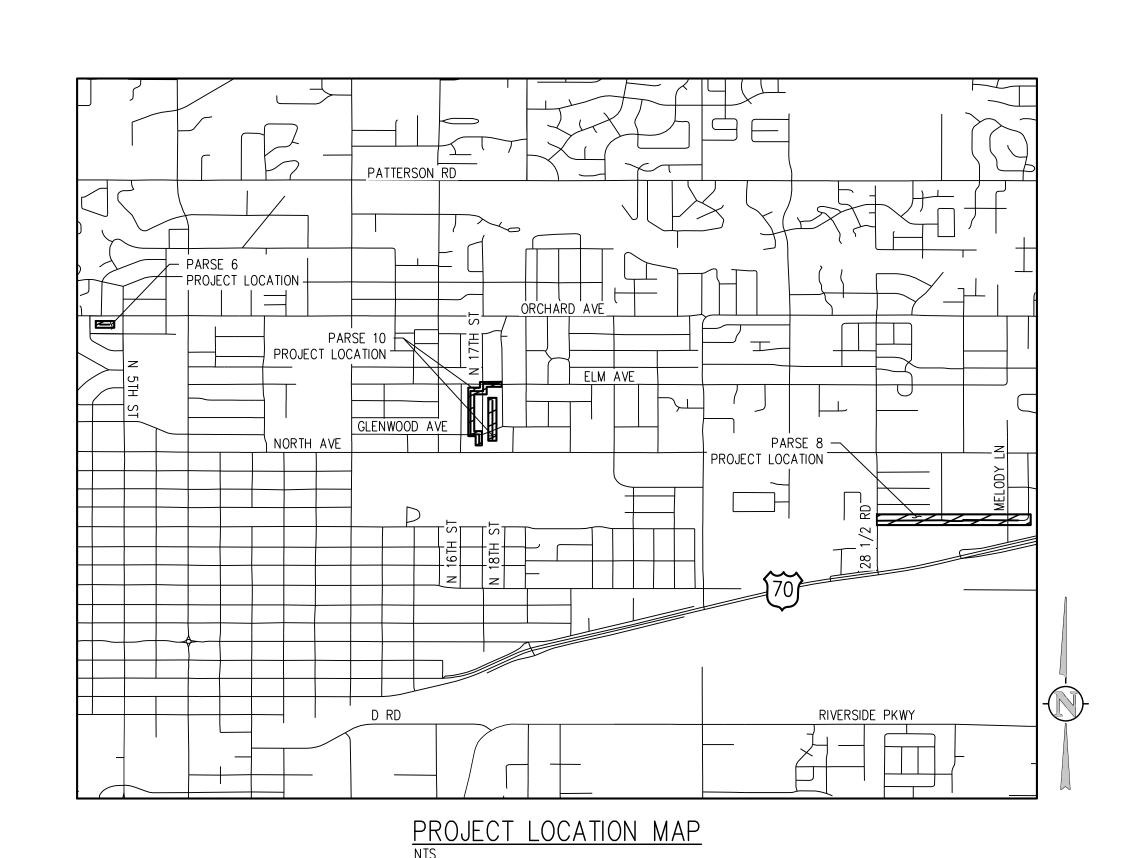
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OCTOBER 2023

PREPARED UNDER THE SUPERVISION OF

JVA, Inc.





DRAWING INDEX

COVER PAGE

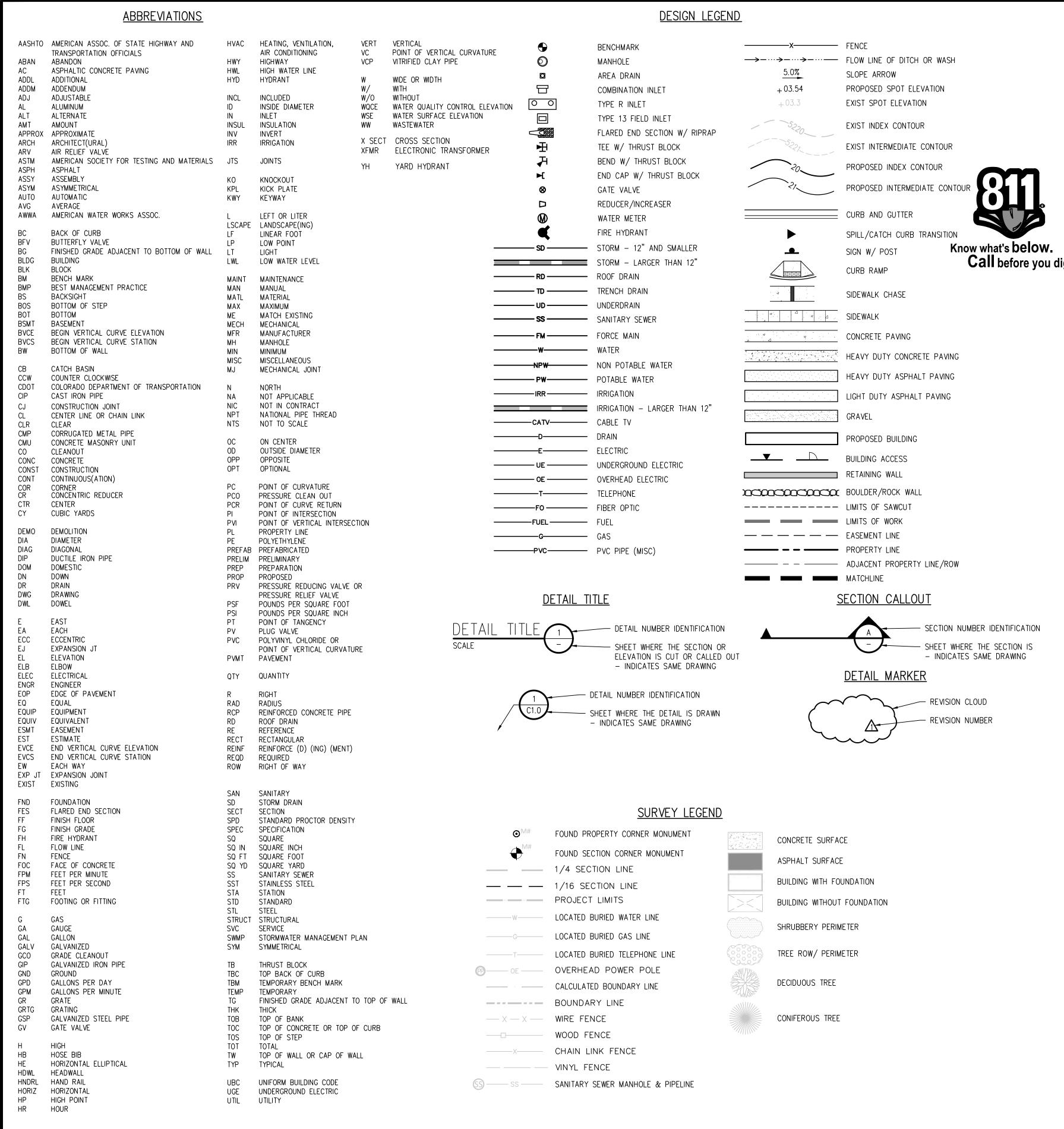
LEGEND, NOTES AND ABBREVIATIONS

SANITARY SEWER PLAN & PROFILE

SHEET NO. TITLE

C2.4

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DESCRIPTION

REVISION A REV 1

REVISION 2 REV 2

REVISION 3 REV 3

REVISION 🕰 <u>REV 4</u>

<u>DATE</u>

DATE

DATE

- <u>DATE</u>

DRAWN BY ____JGJ___

APPROVED BY _____

DESIGNED BY <u>MMR/JGJ</u> DATE <u>MAY 2022</u>

CHECKED BY <u>JJM</u> DATE <u>MAY 2022</u>

___ DATE <u>JAN 23, 202</u>

GENERAL NOTES

- 1. ALL MATERIALS AND WORKMANSHIP SHALL BE IN CONFORMANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF THE CITY OF GRAND JUNCTION, COLORADO DEPARTMENT OF TRANSPORTATION, CITY OF GRAND JUNCTION FIRE PROTECTION REQUIREMENTS, AND APPLICABLE STATE AND LOCAL STANDARDS AND SPECIFICATIONS. THE CONTRACTOR SHALL HAVE IN POSSESSION AT THE JOB SITE AT ALL TIMES ONE (1) SIGNED COPY OF APPROVED PLANS, STANDARDS AND SPECIFICATIONS. CONTRACTOR SHALL CONSTRUCT AND MAINTAIN EMERGENCY ACCESS ROUTES TO THE SITE AND STRUCTURE AT ALL TIMES PER THE APPLICABLE CITY OF GRAND JUNCTION FIRE PROTECTION DISTRICT REQUIREMENTS. THE CONTRACTOR SHALL OBTAIN WRITTEN APPROVAL FOR ANY VARIANCE TO THE ABOVE DOCUMENTS. NOTIFY ENGINEER OF ANY CONFLICTING STANDARDS OR SPECIFICATIONS. IN THE EVENT OF ANY CONFLICTING STANDARD OR SPECIFICATION, THE MORE STRINGENT OR HIGHER QUALITY STANDARD, DETAIL OR SPECIFICATION SHALL APPLY.
- 2. THE CONTRACTOR SHALL OBTAIN, AT HIS OWN EXPENSE, ALL APPLICABLE CODES, LICENSES, STANDARD SPECIFICATIONS, PERMITS, BONDS, ETC., WHICH ARE NECESSARY TO PERFORM THE PROPOSED WORK, INCLUDING, BUT NOT LIMITED TO A LOCAL AND STATE GROUNDWATER DISCHARGE AND COLORADO DEPARTMENT OF HEALTH AND ENVIRONMENT (CDPHE) STORMWATER DISCHARGE PERMIT ASSOCIATED WITH CONSTRUCTION ACTIVITY.
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE REQUIRED PARTY (CITY OF GRAND JUNCTION) AT LEAST 48 HOURS PRIOR TO START OF ANY CONSTRUCTION, PRIOR TO BACKFILLING, AND AS REQUIRED BY JURISDICTIONAL AUTHORITY AND/OR PROJECT SPECIFICATIONS. THE CONTRACTOR SHALL CONTINUE WITH NOTIFICATIONS THROUGHOUT THE PROJECT AS REQUIRED BY THE STANDARDS AND SPECIFICATIONS.
- 4. THE LOCATIONS OF EXISTING UTILITIES ARE SHOWN IN THE APPROXIMATE LOCATION BASED ON INFORMATION BY OTHERS. NOT ALL UTILITIES MAY BE SHOWN. THE CONTRACTOR SHALL DETERMINE THE EXACT SIZE, LOCATION AND TYPE OF ALL EXISTING UTILITIES WHETHER SHOWN OR NOT BEFORE COMMENCING WORK. THE ENGINEER AND/OR OWNER ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OR COMPLETENESS SHOWN ON PLANS. THE CONTRACTOR SHALL BE FULLY AND SOLELY RESPONSIBLE FOR ANY AND ALL DAMAGES AND COSTS WHICH MIGHT OCCUR BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UTILITIES. THE CONTRACTOR SHALL NOTIFY ALL PUBLIC AND PRIVATE UTILITY COMPANIES AND DETERMINE THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO PROCEEDING WITH GRADING AND CONSTRUCTION. ALL WORK PERFORMED IN THE AREA OF UTILITIES SHALL BE PERFORMED AND INSPECTED ACCORDING TO THE REQUIREMENTS OF THE UTILITY OWNER. LIKEWISE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND MAPPING ANY EXISTING UTILITY (INCLUDING DEPTH) WHICH MAY CONFLICT WITH THE PROPOSED CONSTRUCTION, AND FOR RELOCATING ENCOUNTERED UTILITIES AS DIRECTED BY THE ENGINEER. CONTRACTOR SHALL CONTACT AND RECEIVE APPROVAL FROM CITY OF GRAND JUNCTION AND ENGINEER BEFORE RELOCATING ANY ENCOUNTERED UTILITIES. CONTRACTOR RESPONSIBLE FOR SERVICE CONNECTIONS, AND RELOCATING AND RECONNECTING AFFECTED UTILITIES AS COORDINATED WITH UTILITY OWNER AND/OR ENGINEER, INCLUDING NON-MUNICIPAL UTILITIES (TELEPHONE, GAS, CABLE, ETC., WHICH SHALL BE COORDINATED WITH THE UTILITY OWNER). THE CONTRACTOR SHALL IMMEDIATELY CONTACT ENGINEER UPON DISCOVERY OF A UTILITY DISCREPANCY OR CONFLICT. AT LEAST 48 HOURS PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE UTILITY NOTIFICATION CENTER OF COLORADO (1-800-922-1987, WWW.UNCC.ORG). SEE SURVEY UTILITY LOCATION INFORMATION BELOW.
- Call before you dig. 5. THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS AT AND ADJACENT TO THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING THE PERFORMANCE OF THE WORK. THE CONTRACTOR SHALL PREPARE A TRAFFIC CONTROL PLAN FOR CITY APPROVAL AND PROVIDE ALL LIGHTS, SIGNS, BARRICADES, FENCING, FLAGMEN OR OTHER DEVICES NECESSARY TO PROVIDE FOR PUBLIC SAFETY. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. THE CONTRACTOR AGREES TO COMPLY WITH THE PROVISIONS OF THE TRAFFIC CONTROL PLAN AND THE LATEST EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES," PART VI, FOR CONSTRUCTION SIGNAGE AND TRAFFIC CONTROL. ALL TEMPORARY AND PERMANENT TRAFFIC SIGNS SHALL COMPLY TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) WITH REGARD TO SIGN SHAPE, COLOR, SIZE, LETTERING, ETC. UNLESS OTHERWISE SPECIFIED. IF APPLICABLE, PART NUMBERS ON SIGNAGE DETAILS REFER TO MUTCD SIGN NUMBERS.
 - 6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ANY GROUNDWATER ENCOUNTERED DURING THE CONSTRUCTION OF ANY PORTION OF THIS PROJECT. GROUNDWATER SHALL BE PUMPED, PIPED, REMOVED AND DISPOSED OF IN A MANNER WHICH DOES NOT CAUSE FLOODING OF EXISTING STREETS NOR EROSION ON ABUTTING PROPERTIES IN ORDER TO CONSTRUCT THE IMPROVEMENTS SHOWN ON THESE PLANS. GROUNDWATER TO BE PUMPED SHALL BE TESTED, PERMITTED, AND PUMPED PER THE STATE OF COLORADO AND LOCAL GROUNDWATER DISCHARGING PERMIT REQUIREMENTS.
 - 7. RIM AND GRATE ELEVATIONS SHOWN ON PLANS ARE APPROXIMATE ONLY AND ARE NOT TO BE TAKEN AS FINAL ELEVATIONS. THE CONTRACTOR SHALL ADJUST RIMS AND OTHER IMPROVEMENTS TO MATCH FINAL PAVEMENT AND FINISHED GRADE ELEVATIONS.
 - 8. THE EXISTING AND PROPOSED ELEVATIONS OF FLATWORK, SIDEWALKS, CURBS, THRESHOLDS, PAVING, ETC. AS SHOWN HEREON ARE BASED ON EXTRAPOLATION OF FIELD SURVEY DATA, EXISTING CONDITIONS, AND DATA PROVIDED BY OTHERS. AT CRITICAL AREAS AND SITE FEATURES, CONTRACTOR SHALL HAVE FORMWORK INSPECTED AND APPROVED BY OWNER, OWNER'S REPRESENTATIVE, OR ENGINEER PRIOR TO PLACING CONCRETE. MINOR ADJUSTMENTS, AS APPROVED, TO PROPOSED GRADES, INVERTS, ETC. MAY BE REQUIRED TO PREVENT PONDING OR SLOPE NOT IN CONFORMANCE WITH MUNICIPAL STANDARDS. ALL FLATWORK MUST PREVENT PONDING AND PROVIDE POSITIVE DRAINAGE AWAY FROM EXISTING AND PROPOSED BUILDINGS, WALLS, ROOF DRAIN OUTFALLS, ACROSS DRIVES AND WALKS, ETC., TOWARDS THE PROPOSED INTENDED DRAINAGE FEATURES AND CONVEYANCES.
 - 9. ANY EXISTING MONITORING WELLS, CLEANOUTS, VALVE BOXES, ETC. TO BE PROTECTED AND TO REMAIN IN SERVICE. IF FEATURES EXIST, EXTEND OR LOWER TO FINAL SURFACE WITH LIKE KIND CAP WITH STANDARD CAST ACCESS LID WITH SAME MARKINGS. IN LANDSCAPED AREAS PROVIDE A CONCRETE COLLAR (18"x18"x6" THICK) AT ALL EXISTING AND PROPOSED MONITORING WELLS, CLEANOUTS, VALVE BOXES, ETC.
 - 10. PIPE LENGTHS AND HORIZONTAL CONTROL POINTS SHOWN ARE FROM CENTER OF STRUCTURES, END OF FLARED END SECTIONS, ETC. SEE STRUCTURE DETAILS FOR EXACT HORIZONTAL CONTROL LOCATION. CONTRACTOR IS RESPONSIBLE FOR ADJUSTING ACTUAL PIPE LENGTHS TO ACCOUNT FOR STRUCTURES AND LENGTH OF FLARED END SECTIONS.
 - 11. ALL SURPLUS MATERIALS, TOOLS, AND TEMPORARY STRUCTURES, FURNISHED BY THE CONTRACTOR, SHALL BE REMOVED FROM THE PROJECT SITE BY THE CONTRACTOR. ALL DEBRIS AND RUBBISH CAUSED BY THE OPERATIONS OF THE CONTRACTOR SHALL BE REMOVED, AND THE AREA OCCUPIED DURING CONSTRUCTION ACTIVITIES SHALL BE RESTORED TO ITS ORIGINAL CONDITION, WITHIN 48 HOURS OF PROJECT COMPLETION, UNLESS OTHERWISE DIRECTED BY THE MUNICIPALITY OR OWNER'S REPRESENTATIVE.
 - 12. THE CONTRACTOR IS REQUIRED TO PROVIDE AND MAINTAIN EROSION AND SEDIMENT CONTROL MEASURES IN ACCORDANCE WITH THE LOCAL JURISDICTION, THE STATE OF COLORADO, MILE HIGH FLOOD DISTRICT "URBAN STORM DRAINAGE CRITERIA MANUAL VOLUME 3", THE M-STANDARD PLANS OF THE COLORADO DEPARTMENT OF TRANSPORTATION, AND THE APPROVED EROSION CONTROL PLAN. JURISDICTIONAL AUTHORITY MAY REQUIRE THE CONTRACTOR TO PROVIDE ADDITIONAL EROSION CONTROL MEASURES AT THE CONTRACTOR'S EXPENSE DUE TO UNFORESEEN EROSION PROBLEMS OR IF THE PLANS DO NOT FUNCTION AS INTENDED THE CONTRACTOR IS RESPONSIBLE FOR PROHIBITING SILT AND DEBRIS LADEN RUNOFF FROM LEAVING THE SITE, AND FOR KEEPING ALL PUBLIC AREAS FREE OF MUD AND DEBRIS. THE CONTRACTOR IS RESPONSIBLE FOR RE-ESTABLISHING FINAL GRADES AND FOR REMOVING ACCUMULATED SEDIMENTATION FROM ALL AREAS INCLUDING SWALES AND DETENTION/WATER QUALITY AREAS. CONTRACTOR SHALL REMOVE TEMPORARY EROSION CONTROL MEASURES AND REPAIR AREAS AS REQUIRED AFTER VEGETATION IS ESTABLISHED AND ACCEPTED BY OWNER AND MUNICIPALITY.
 - 13. ADA COMPLIANCE: THE CROSS-SLOPE OF ALL WALKS MUST BE LESS THAN 1:48 (2.0%) PERPENDICULAR TO DIRECTION OF TRAVEL. RUNNING SLOPE OF ACCESSIBLE WALKS MUST BE NOT STEEPER THAN 1:20 (5.0%) IN DIRECTION OF TRAVEL. MAXIMUM GRADE OF ACCESSIBLE CURB RAMPS AND RAMPS IS 1:12 (8.3%). CURB RAMPS SHALL PROVIDE A LANDING AT THE TOP AND RAMP RUNS PROVIDE LANDINGS AT THE BOTTOM AND TOP OF EACH RAMP RUN AT A SLOPE NOT TO EXCEED 1:48. RAMPS RUNS EXCEEDING SIX INCHES SHALL INCLUDE HANDRAILS. ACCESSIBLE PARKING SPACES AND ACCESS AISLES SHALL NOT EXCEED 1:48 IN ALL DIRECTIONS. CONTRACTOR SHALL NOTIFY ENGINEER PRIOR TO PLACEMENT OF FLATWORK OF SITE CONDITIONS OR DISCREPANCIES WHICH PREVENT TYPICAL REQUIRED GRADES FROM BEING ACHIEVED. ALL RAMPS, STAIRS, EDGE PROTECTION, AND RAILINGS SHALL BE CONSTRUCTED IN ACCORDANCE WITH CURRENT ADA STANDARDS. ACCESSIBLE CURB RAMPS SHALL CONFORM TO THE CDOT M-STANDARDS (SEE DETAIL M-608-1, ETC). ACCESSIBLE FEATURE WITHIN THE PUBLIC RIGHTS-OF-WAY SHALL BE CONSTRUCTED TO CONFORM TO THE LOCAL AUTHORITY HAVING JURISDICTION REQUIREMENTS.
 - 14. LOCATIONS OF CLEANOUTS, LIGHTS, SIGNAGE, JUNCTION BOXES, AND OTHER SIGNIFICANT SITE FEATURES TO BE STAKED FOR ENGINEER AND OR OWNER APPROVAL PRIOR TO WORK. CLEANOUTS, JUNCTION BOXES, AND ADJACENT GRADES TO BE RAISED ONE-HALF INCH AT ASPHALT/CONCRETE (OR 1" AT LANDSCAPING) TO PROVIDE POSITIVE DRAINAGE AWAY FROM FEATURES

15.1. BENCHMARK INFORMATION: TOPOGRAPHIC INFORMATION WAS PROVIDED BY CITY OF GRAND JUNCTION SEE IMPROVEMENT AND MAPPING SURVEY PARSE 6 DATED SEPTEMBER 7, 2021, BY WILLIAM H. SMITH & ASSOCIATES, INC. (WHS). THE FIELD SURVEYS AND PROCESSING OF DATA WAS MADE IN THE MESA COUNTY LOCAL COORDINATE SYSTEM (MCLCS) GRAND VALLEY AREA (GVA) ZONE AND NAVD88 VERTICAL DATUM WITH GEOID 12A MODEL TO CONVERT ELLIPSOID HEIGHTS TO ORTHOMETRIC ELEVATIONS. THE MCLCS USED THE IN THE SAID WHS SURVEY ARE BASED UPON REFERENCE FROM:

MESA COUNTY CONTROL POINT P310 - PRECISION B-5PPM NORTH 28231.71 SFT (MCGVA) EAST 92054.57 SFT (MCGVA) NAVD 88. G12A ELEVATION: 4631.32 SFT LATITUDE: 39° 02' 47.60643" N LONGITUDE: 108° 33' 42.12299" W

ELLIPSOID HEIGHT: 1394.760 METER

MESA COUNTY CONTROL POINT P318 - PRECISION B-5PPM NORTH 19671.32 SFT (MCGVA) EAST 110221.18 SFT (MCGVA) NAVD 88, G12A ELEVATION: 4793.43 SFT LATITUDE: 39° 01' 23.00622" N LONGITUDE: 108° 29' 51.95172" W ELLIPSOID HEIGHT: 1444.23 METERS

COMMENT: NGS 9/16" STAINLESS STEEL ROD IN MONUMENT WELL COMMENT: NGS 9/16" STAINLESS STEEL ROD IN MONUMENT WELL 15.2. BEARINGS ARE BASED ON GRID NORTH OF THE MESA COUNTY LOCAL COORDINATE SYSTEM IN THE GVA ZONE, LOCALLY DETERMINED BY GNSS OBSERVATIONS ON THE SHOWN BLOCK CORNER MONUMENTS RECOVERED IN SECTION 11, TOWNSHIP 1 SOUTH AT RANGE 1 WEST AT THE INTERSECTION OF ORCHARD AVENUE WITH NORTH 4TH STREET AND THE BLOCK CORNER MONUMENT AT THE INTERSECTION OF

ORCHARD AVENUE WITH NORTH 5TH STREET AS HAVING A MEASURED BEARING OF SOUTH 89° 57' 28" EAST AND A MEASURED DISTANCE OF 480.04 FEET 15.3. HORIZONTAL CONTROL INFORMATION: HORIZONTAL CONTROL COORDINATES ARE BASED ON THE REFERENCED SURVEY AND ARE PROVIDED BY THE FOLLOWING POINTS AS SHOWN ON THE PLANS:

CP-1 N41548.77 E90938.17 ELEV 4612.22 1" IRON PIPE / 0.8' BELOW GROUND

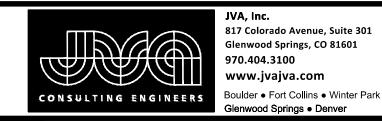
CP-2 N41726.12 E91024.48 ELEV 4617.27 1/2" IRON PIPE / 0.1' BELOW GROUND

CP-3 N41726.26 E91099.59 ELEV 4617.68 NO. 5 REBAR (BENT ON TOP) / 0.1' BELOW GROUND

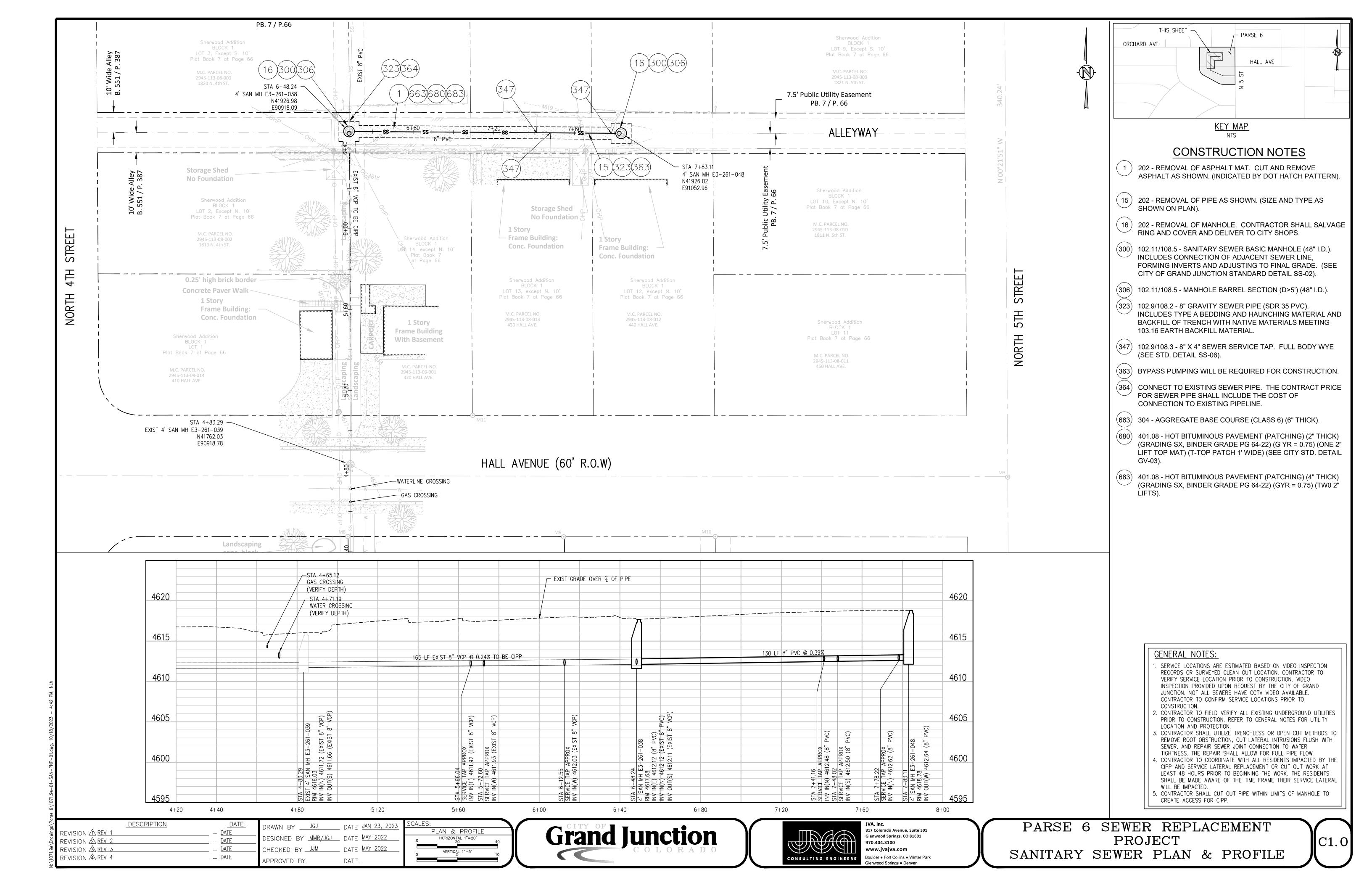
- 15.4. SURVEY UTILITY LOCATION INFORMATION PER THE SURVEYOR: SUBSURFACE UTILITIES ARE SHOWN IN APPROXIMATE HORIZONTAL AND VERTICAL LOCATIONS CONSISTENT WITH ASCE 38-02 QUALITY LEVEL "B" (INFORMATION OBTAINED BY THE APPLICATION OF APPROPRIATE SURFACE GEOPHYSICAL METHODS TO DETERMINE THE EXISTENCE AND HORIZONTAL POSITION OF VIRTUALLY ALL UTILITIES WITHIN THE PROJECT LIMITS. THE INFORMATION OBTAINED IN THIS MANNER IS SURVEYED TO PROJECT CONTROL.) AND QUALITY LEVEL "C" (INFORMATION OBTAINED BY SURVEYING AND PLOTTING VISIBLE ABOVE-GROUND UTILITY FEATURES AND BY USING PROFESSIONAL JUDGMENT IN CORRELATING THIS INFORMATION TO QUALITY LEVEL D; INFORMATION DERIVED FROM EXISTING RECORDS OR ORAL RECOLLECTIONS), AND BASED ON FIELD MEASUREMENTS PROVIDED BY THE OWNER AND THE CONTRACTOR. SUBSURFACE UTILITIES ARE NOT DEPICTED TO THE EXTENT SET FORTH IN ASCE 38-02 QUALITY LEVELS "A" (INFORMATION OBTAINED THROUGH THE NONDESTRUCTIVE EXPOSURE OF UNDERGROUND UTILITIES, AND ALSO PROVIDES THE TYPE, SIZE, CONDITION, MATERIAL AND OTHER CHARACTERISTICS OF UNDERGROUND FEATURES.). TO THE EXTENT DEEMED NECESSARY FOR THE PROTECTION OF PERSONS AND PROPERTY, POTHOLING OR OTHER PRECISE MAPPING MAY BE COMPLETED TO CONFIRM THE EXACT LOCATION OF ANY SUBSURFACE UTILITIES. NOTIFY OWNER AND ENGINEER WITH ALL UTILITY INFORMATION PRIOR TO CONSTRUCTION. VISIT HTTPS: //WWW.FHWA.DOT.GOV/PROGRAMADMIN/SUEINDEX.CFM FOR MORE INFORMATION.
- 15.5. SERVICE TAP LOCATIONS ARE APPROXIMATE AND IDENTIFIED BASED ON CCTV VIDEOS PROVIDED BY THE CITY OF GRAND JUNCTION. CONTRACTOR IS RESPONSIBLE FOR LOCATING AND RESTORING ALL SERVICE
- 16. THE CONTRACTOR AT THE CONTRACTORS EXPENSE SHALL FURNISH THE OWNER AND ENGINEER OF RECORD A COMPLETE SET OF CONSTRUCTION RECORD DRAWINGS ("AS-BUILTS") FOR THE CONSTRUCTED IMPROVEMENTS. THE AS-BUILT SET SHALL SHOW SUFFICIENT DIMENSION TIES TO PERMANENT SURFACE FEATURES OR NORTHING/EASTING POINTS FOR ALL BURIED FACILITIES TO ALLOW FOR FUTURE LOCATING. THE AS-BUILT SET SHALL SHOW AS-BUILT CONTOURS AND ELEVATIONS OF ASPHALT AND CONCRETE FLATWORK, FLOWLINES, GRADE BREAKS, STAIRS, CROSS-SLOPES, HIGH AND LOW POINTS, AND ADDITIONAL ELEVATIONS TO DEMONSTRATE IMPROVEMENTS WERE CONSTRUCTED PER PLANS. THE AS-BUILT SET SHALL SHOW ELEVATIONS OF ALL DETENTION/WATER QUALITY FACILITIES, INCLUDING BUT NOT LIMITED TO BERMS, SPILLWAYS, BASIN BOTTOM, PIPE INVERTS, AND CONTROL STRUCTURE FEATURES (AS SURVEYED AND STAMPED BY A CERTIFIED P.L.S.). THE AS-BUILT SET SHALL ALSO INCLUDE ELEVATIONS OF MANHOLES, PIPES, INLETS, GRATES, AND SIZES OF ALL UTILITIES. THE AS-BUILT SET SHALL SHOW ANY AND ALL VARIATIONS FROM THE APPROVED PLAN. ENGINEER WILL PRODUCE FINAL RECORD DRAWINGS.

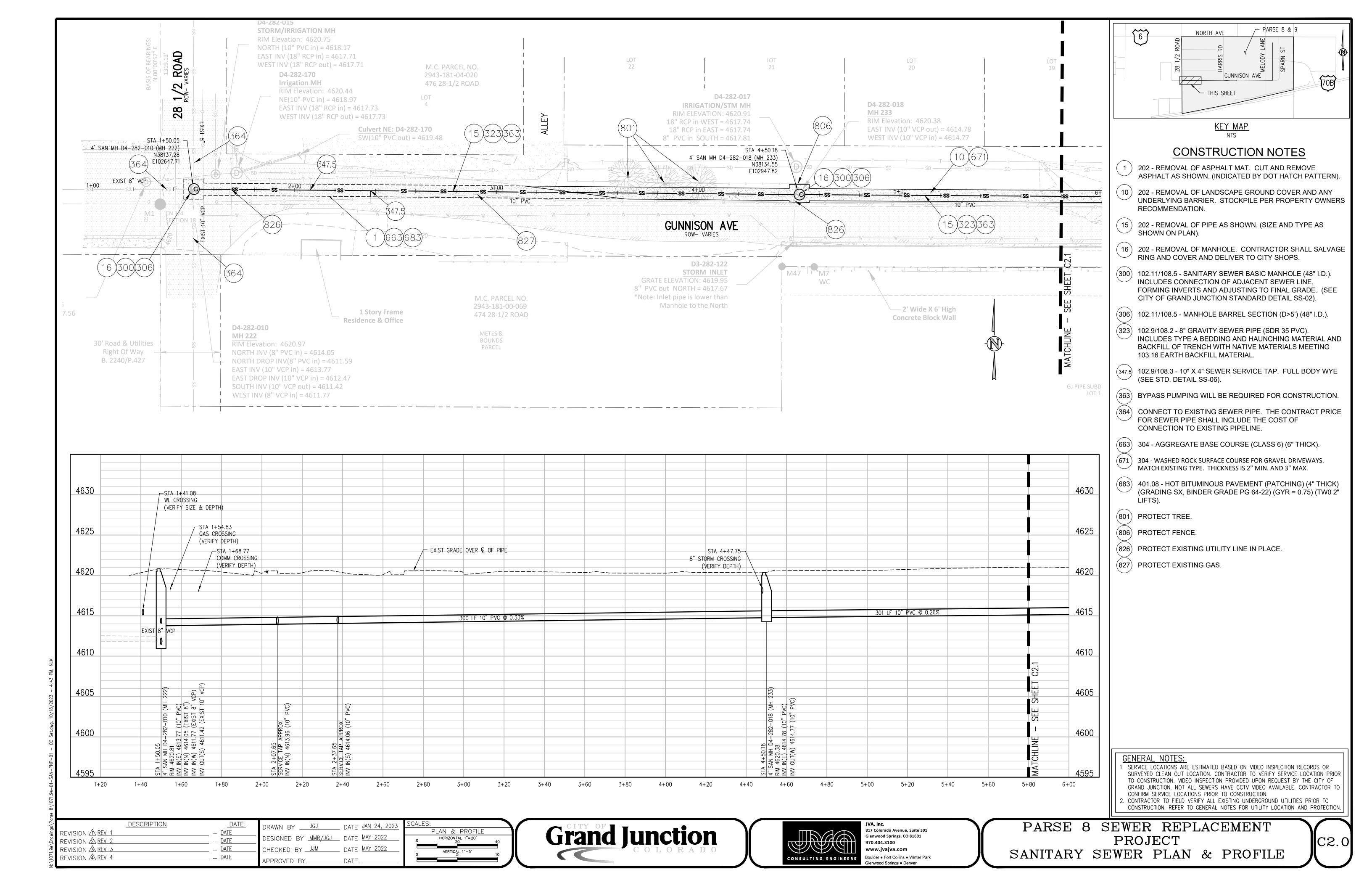
PLAN & PROFILE

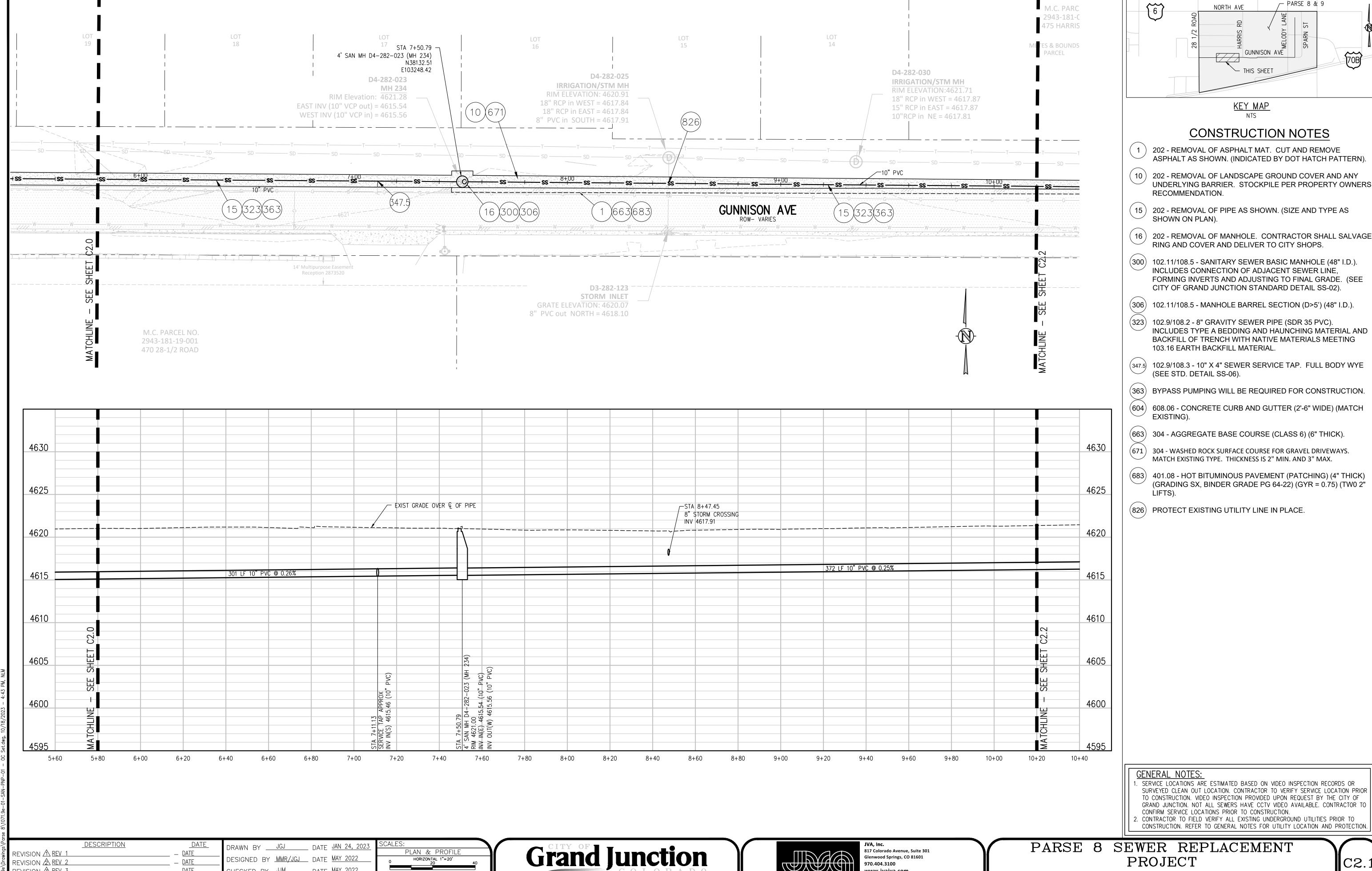
Grand Junction



PARSES OPEN-CUT SEWER REPLACEMENT LEGEND, NOTES AND ABBREVIATIONS







CHECKED BY JJM DATE MAY 2022

APPROVED BY _____ DATE _

_ <u>DATE</u>

VERTICAL 1"=5"

REVISION & REV 3

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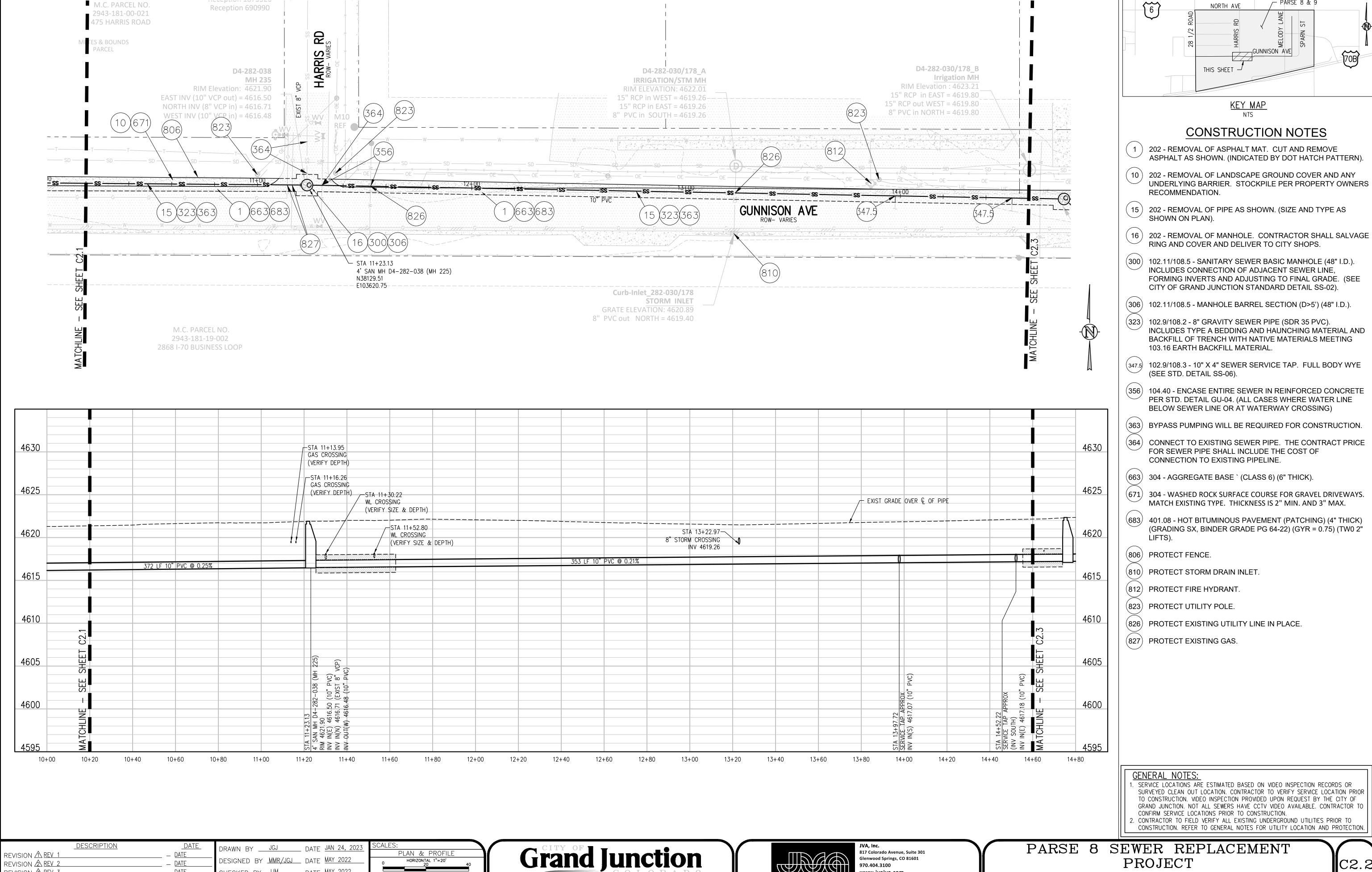
PROJECT SANITARY SEWER PLAN & PROFILE

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APPROVED BY _____ DATE _

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VERTICAL 1"=5"

970.404.3100

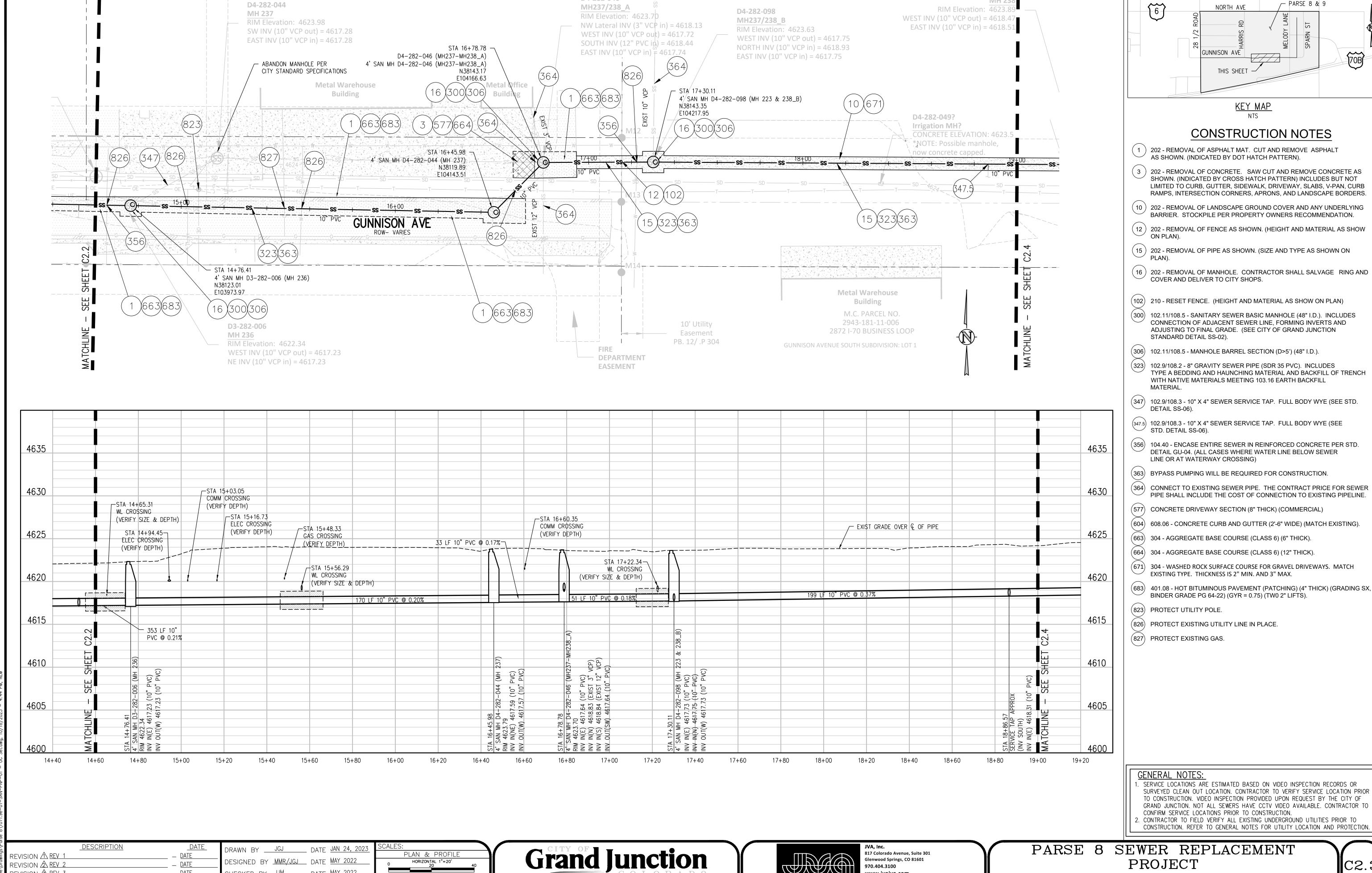
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CHECKED BY <u>JJM</u> DATE <u>MAY 2022</u>

APPROVED BY _____ DATE _

VERTICAL 1"=5"

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PROJECT SANITARY SEWER PLAN & PROFILE

970.404.3100

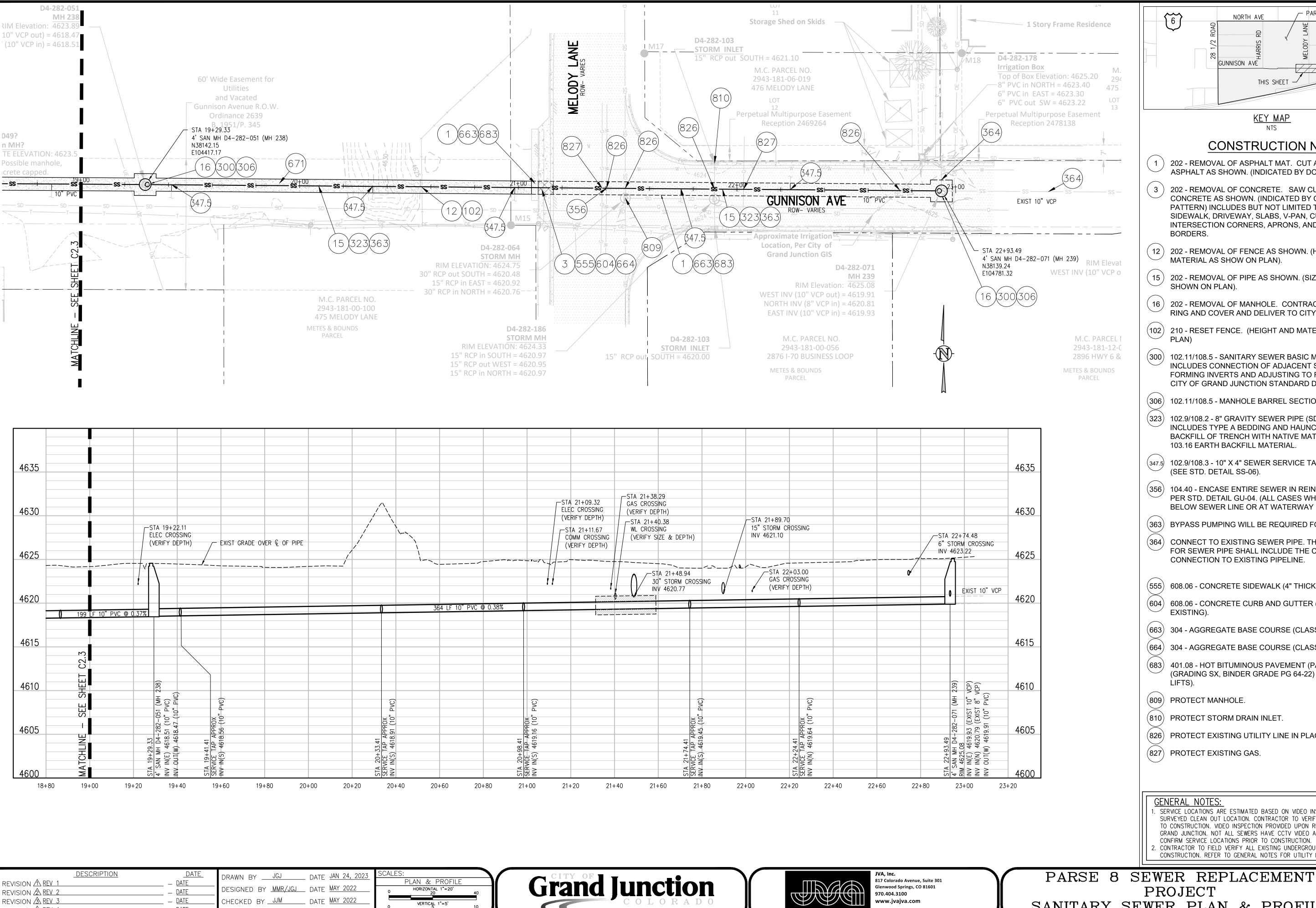
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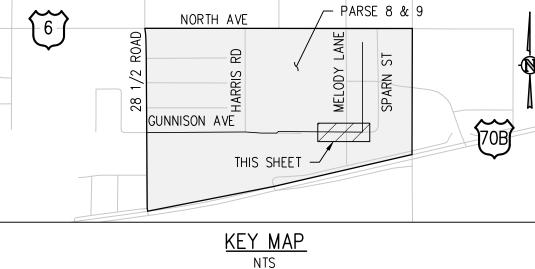
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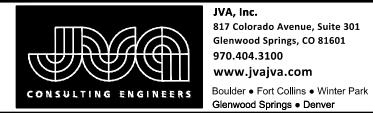
CONSTRUCTION NOTES

- 202 REMOVAL OF ASPHALT MAT. CUT AND REMOVE ASPHALT AS SHOWN. (INDICATED BY DOT HATCH PATTERN)
- 202 REMOVAL OF CONCRETE. SAW CUT AND REMOVE CONCRETE AS SHOWN. (INDICATED BY CROSS HATCH PATTERN) INCLUDES BUT NOT LIMITED TO CURB, GUTTER SIDEWALK, DRIVEWAY, SLABS, V-PAN, CURB RAMPS, INTERSECTION CORNERS, APRONS, AND LANDSCAPE
- (12) 202 REMOVAL OF FENCE AS SHOWN. (HEIGHT AND MATERIAL AS SHOW ON PLAN).
- (15) 202 REMOVAL OF PIPE AS SHOWN. (SIZE AND TYPE AS
- (16) 202 REMOVAL OF MANHOLE. CONTRACTOR SHALL SALVAGE RING AND COVER AND DELIVER TO CITY SHOPS.
- (102) 210 RESET FENCE. (HEIGHT AND MATERIAL AS SHOW ON
- (300) 102.11/108.5 SANITARY SEWER BASIC MANHOLE (48" I.D.). INCLUDES CONNECTION OF ADJACENT SEWER LINE, FORMING INVERTS AND ADJUSTING TO FINAL GRADE. (SEE CITY OF GRAND JUNCTION STANDARD DETAIL SS-02).
- (306) 102.11/108.5 MANHOLE BARREL SECTION (D>5') (48" I.D.).
- (323) 102.9/108.2 8" GRAVITY SEWER PIPE (SDR 35 PVC). INCLUDES TYPE A BEDDING AND HAUNCHING MATERIAL AND BACKFILL OF TRENCH WITH NATIVE MATERIALS MEETING 103.16 EARTH BACKFILL MATERIAL.
- (347.5) 102.9/108.3 10" X 4" SEWER SERVICE TAP. FULL BODY WYE (SEE STD. DETAIL SS-06).
- (356) 104.40 ENCASE ENTIRE SEWER IN REINFORCED CONCRETE PER STD. DETAIL GU-04. (ALL CASES WHERE WATER LINE BELOW SEWER LINE OR AT WATERWAY CROSSING)
- (363) BYPASS PUMPING WILL BE REQUIRED FOR CONSTRUCTION.
- (364) CONNECT TO EXISTING SEWER PIPE. THE CONTRACT PRICE FOR SEWER PIPE SHALL INCLUDE THE COST OF CONNECTION TO EXISTING PIPELINE.
- (555) 608.06 CONCRETE SIDEWALK (4" THICK).
- (604) 608.06 CONCRETE CURB AND GUTTER (2'-6" WIDE) (MATCH
- (663) 304 AGGREGATE BASE COURSE (CLASS 6) (6" THICK).
- (664) 304 AGGREGATE BASE COURSE (CLASS 6) (12" THICK)
- (683) 401.08 HOT BITUMINOUS PAVEMENT (PATCHING) (4" THICK) (GRADING SX, BINDER GRADE PG 64-22) (GYR = 0.75) (TW0 2"

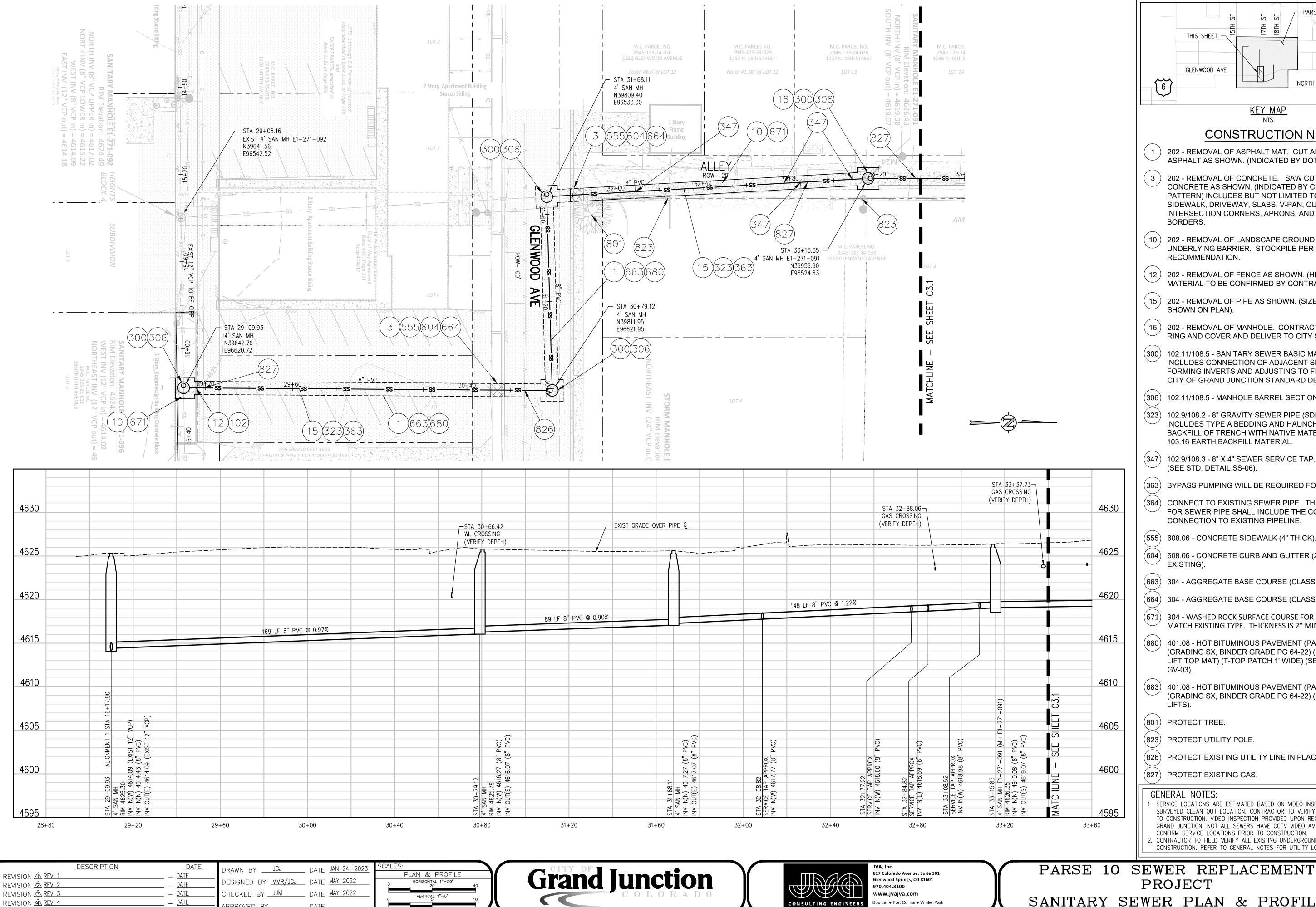
- (826) PROTECT EXISTING UTILITY LINE IN PLACE.

. SERVICE LOCATIONS ARE ESTIMATED BASED ON VIDEO INSPECTION RECORDS OR SURVEYED CLEAN OUT LOCATION. CONTRACTOR TO VERIFY SERVICE LOCATION PRIOR TO CONSTRUCTION. VIDEO INSPECTION PROVIDED UPON REQUEST BY THE CITY OF GRAND JUNCTION. NOT ALL SEWERS HAVE CCTV VIDEO AVAILABLE. CONTRACTOR TO CONFIRM SERVICE LOCATIONS PRIOR TO CONSTRUCTION. 2. CONTRACTOR TO FIELD VERIFY ALL EXISTING UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION. REFER TO GENERAL NOTES FOR UTILITY LOCATION AND PROTECTION.

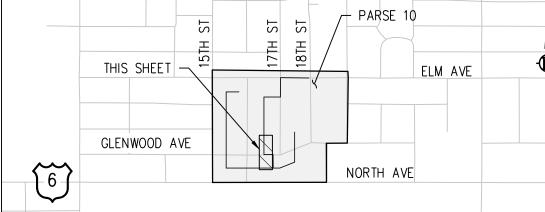
CHECKED BY JJM DATE MAY 2022 REVISION & REV 3 REVISION 🕰 <u>REV 4</u> - <u>DATE</u> APPROVED BY _____ DATE _



SANITARY SEWER PLAN & PROFILE



APPROVED BY _____ DATE _



CONSTRUCTION NOTES

- (1) 202 REMOVAL OF ASPHALT MAT. CUT AND REMOVE ASPHALT AS SHOWN. (INDICATED BY DOT HATCH PATTERN)
- (3) 202 REMOVAL OF CONCRETE. SAW CUT AND REMOVE CONCRETE AS SHOWN. (INDICATED BY CROSS HATCH PATTERN) INCLUDES BUT NOT LIMITED TO CURB, GUTTER, SIDEWALK, DRIVEWAY, SLABS, V-PAN, CURB RAMPS, INTERSECTION CORNERS, APRONS, AND LANDSCAPE BORDERS.
- (10 $)\;$ 202 REMOVAL OF LANDSCAPE GROUND COVER AND ANY UNDERLYING BARRIER. STOCKPILE PER PROPERTY OWNERS RECOMMENDATION.
- (12) 202 REMOVAL OF FENCE AS SHOWN. (HEIGHT AND MATERIAL TO BE CONFIRMED BY CONTRACTOR)
- (15) 202 REMOVAL OF PIPE AS SHOWN. (SIZE AND TYPE AS SHOWN ON PLAN).
- (16) 202 REMOVAL OF MANHOLE. CONTRACTOR SHALL SALVAGE RING AND COVER AND DELIVER TO CITY SHOPS.
- (300) 102.11/108.5 SANITARY SEWER BASIC MANHOLE (48" I.D.). INCLUDES CONNECTION OF ADJACENT SEWER LINE, FORMING INVERTS AND ADJUSTING TO FINAL GRADE. (SEE CITY OF GRAND JUNCTION STANDARD DETAIL SS-02).
- (306) 102.11/108.5 MANHOLE BARREL SECTION (D>5') (48" I.D.).
- (323) 102.9/108.2 8" GRAVITY SEWER PIPE (SDR 35 PVC). INCLUDES TYPE A BEDDING AND HAUNCHING MATERIAL AND BACKFILL OF TRENCH WITH NATIVE MATERIALS MEETING 103.16 EARTH BACKFILL MATERIAL.
- (347) 102.9/108.3 8" X 4" SEWER SERVICE TAP. FULL BODY WYE (SEE STD. DETAIL SS-06).
- (363) BYPASS PUMPING WILL BE REQUIRED FOR CONSTRUCTION.
- (364) CONNECT TO EXISTING SEWER PIPE. THE CONTRACT PRICE FOR SEWER PIPE SHALL INCLUDE THE COST OF CONNECTION TO EXISTING PIPELINE.
- (555) 608.06 CONCRETE SIDEWALK (4" THICK).
- (604) 608.06 CONCRETE CURB AND GUTTER (2'-6" WIDE) (MATCH EXISTING).
- (663) 304 AGGREGATE BASE COURSE (CLASS 6) (6" THICK).
- (664) 304 AGGREGATE BASE COURSE (CLASS 6) (12" THICK).
- (671) 304 WASHED ROCK SURFACE COURSE FOR GRAVEL DRIVEWAYS. MATCH EXISTING TYPE. THICKNESS IS 2" MIN. AND 3" MAX.
- (680) 401.08 HOT BITUMINOUS PAVEMENT (PATCHING) (2" THICK) (GRADING SX, BINDER GRADE PG 64-22) (G YR = 0.75) (ONE 2" LIFT TOP MAT) (T-TOP PATCH 1' WIDE) (SEE CITY STD. DETAIL GV-03).
- (683) 401.08 HOT BITUMINOUS PAVEMENT (PATCHING) (4" THICK) (GRADING SX, BINDER GRADE PG 64-22) (GYR = 0.75) (TW0 2"
- (801) PROTECT TREE.
- (823) PROTECT UTILITY POLE.
- (826) PROTECT EXISTING UTILITY LINE IN PLACE.
- (827) PROTECT EXISTING GAS.

GENERAL NOTES:

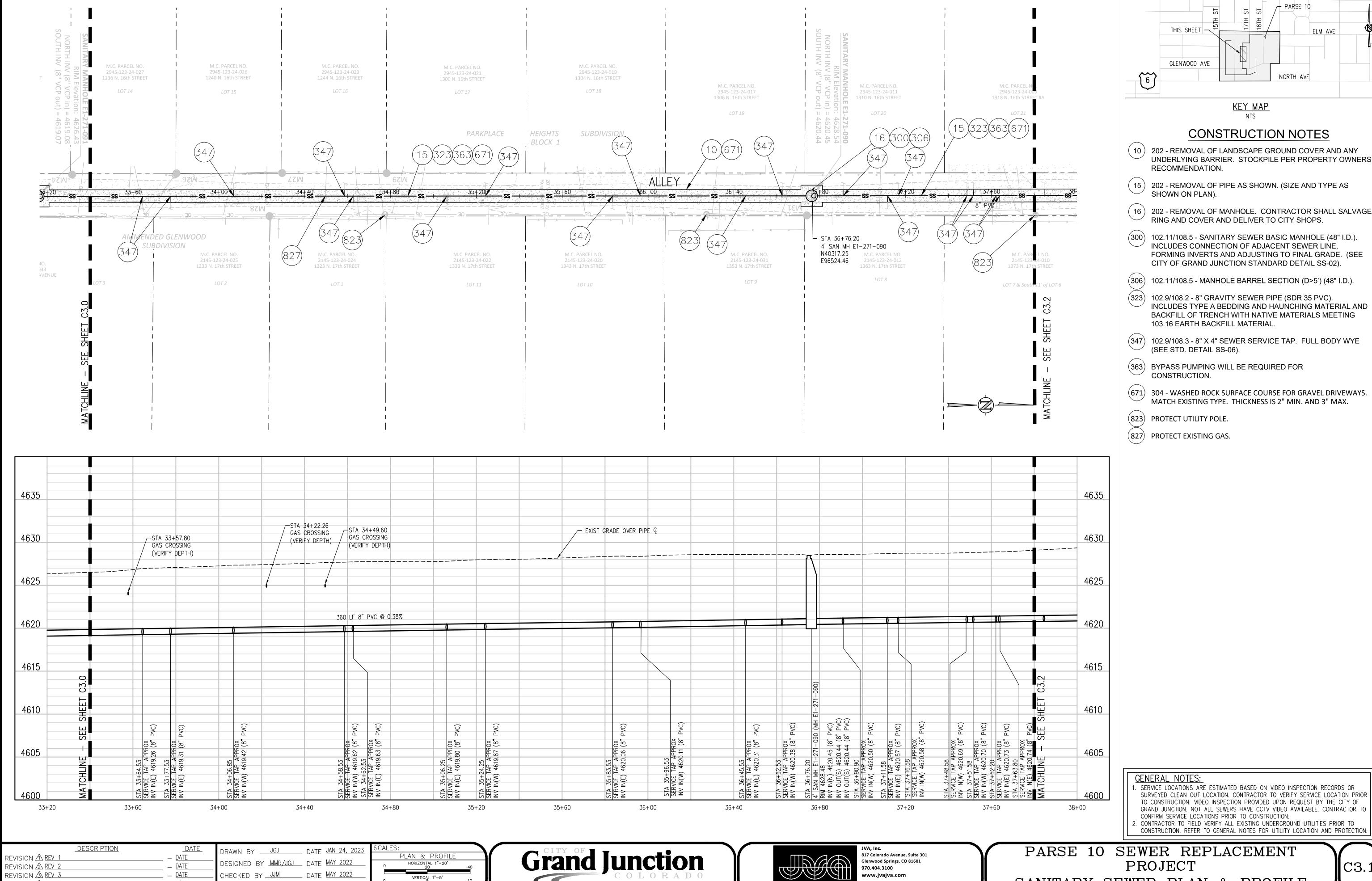
SERVICE LOCATIONS ARE ESTIMATED BASED ON VIDEO INSPECTION RECORDS OR SURVEYED CLEAN OUT LOCATION. CONTRACTOR TO VERIFY SERVICE LOCATION PRIOR TO CONSTRUCTION. VIDEO INSPECTION PROVIDED UPON REQUEST BY THE CITY OF GRAND JUNCTION. NOT ALL SEWERS HAVE CCTV VIDEO AVAILABLE. CONTRACTOR TO CONFIRM SERVICE LOCATIONS PRIOR TO CONSTRUCTION. . CONTRACTOR TO FIELD VERIFY ALL EXISTING UNDERGROUND UTILITIES PRIOR TO

CONSTRUCTION. REFER TO GENERAL NOTES FOR UTILITY LOCATION AND PROTECTION.

PROJECT SANITARY SEWER PLAN & PROFILE

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VERTICAL 1"=5'

CHECKED BY <u>JJM</u> DATE <u>MAY 2022</u>

_ <u>DATE</u>

REVISION A REV 3

REVISION A REV 4

PROJECT SANITARY SEWER PLAN & PROFILE

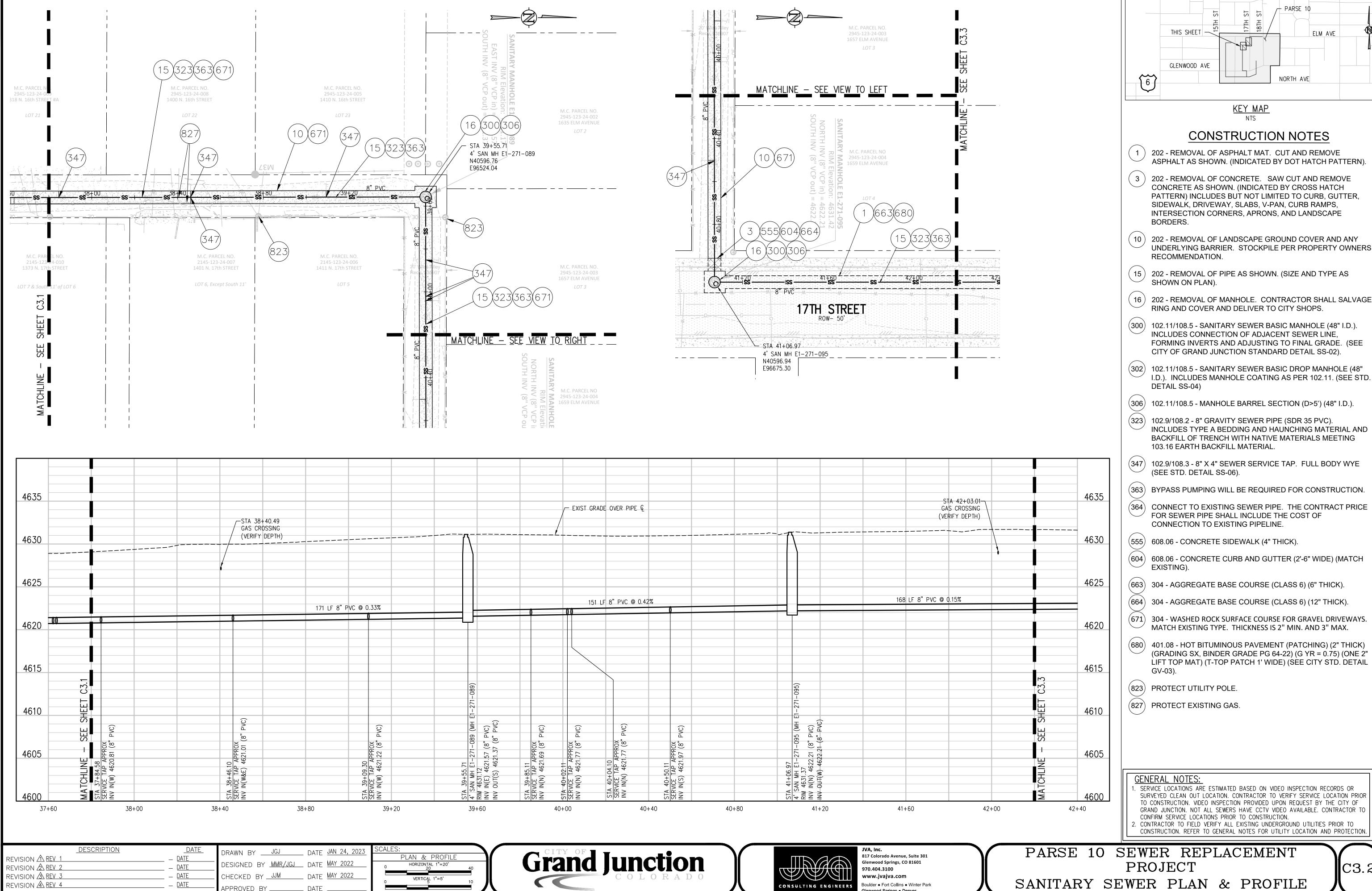
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C3.1

ELM AVE



APPROVED BY _____ DATE _

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C3.2

